Appl. No. 09/869,630

Amdt. Dated 3 September 2003

Reply to Office action of 3 June 2003

REMARKS

Claims 1-9 are pending in the instant application. Claims 1-6 stand rejected under 35 U.S.C. §102(b) as being unpatentable over United States Patent No. 6,090,800 to Unger. Claims 7-9 stand rejected under 35 U.S.C. §103(a) to Unger. The rejections are respectfully traversed. Reconsideration is respectfully requested.

Claims 1-6 stand rejected under 35 U.S.C. §102(e) as being unpatentable over United States Patent No. 6,090,800 to Unger. This rejection is respectfully traversed.

The present invention relates to an *in vitro* method which comprises labelling a biological molecule with hyperpolarized xenon and observing either the NMR image or NMR spectrum of the environment of the biological molecule.

Unger discloses the use of hyperpolarized xenon with steroidal compounds in whole body imaging.

The examiner has cited phrases from Unger in concluding that the present invention is anticipated by Unger. Applicants respectfully submit, however, that when these phrases are read in the context of Unger's invention, it is clear that the present invention is not anticipated thereby.

In stating that Unger discloses an *in vitro* method, the examiner has merely quoted various places in the text where the words *in vitro* have been used. Column 5 line 64 deals with the definition of "bioactive agent", which may be capable of exerting a biological effect *in vitro*. Column 6 line 17 states that a "delivery vehicle" is capable of transporting a bioactive agent *in vitro*. Column 10 line 9 states that a "targeting ligand" may promote targeting of tissues and/or receptors *in vitro*. Column 12 line 40 states that the steroid

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prodrugs of the Unger invention may contain reversible derivatives which can modify the effects of the steroid *in vitro*. Column 82 line 66 refers to *in vitro* use of gas-filled vesicles. Applicants submit that none of these cited references to Unger disclose an *in vitro* method which comprises labelling a biological molecule with hyperpolarized xenon.

Moreover, where Unger does discuss the use of hyperpolarized xenon, it is only in the course of 'whole body imaging', not as part of an *in vitro* method. The examiner quotes column 57 line 24 as support for the contention that Unger discloses labelling a biological molecule with xenon, however, the use of hyperpolarized xenon disclosed thereat relates solely to a method of "MR whole body imaging" (column 57 line 25). There is no disclosure of the use of hyperpolarized xenon in an *in vitro* method. Additionally, Unger fails to even relate the disclosure for hyperpolarized xenon and the various *in vitro* disclosures discussed above.

Therefore, as Unger fails to disclose an *in vitro* method of labelling a biological molecule with hyperpolarized xenon, as claimed by the present invention, Applicants respectfully submit that Unger fails to anticipate the present invention. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 7-9 stand rejected under 35 U.S.C. §103(a) to Unger. This rejection is respectfully traversed.

The Examiner rejects claims 7-9 as being obvious over Unger. Because claims 7-9 include all the features of claim 1, which is submitted as being patentable, Applicants respectfully submit that claims 7-9 are likewise patentable as depending from patentable claims. Reconsideration and withdrawal of the rejection is respectfully submitted.

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In view of the remarks hereinabove, Applicants respectfully submit that the present invention, including claims 1-9, are patentably distinct over the prior art. Favorable action thereon is respectfully requested.

Any questions with respect to the foregoing may be directed to Applicants' undersigned counsel at the telephone number below.

Respectfully submitted,

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